

SDS: 0011451 **Date Prepared:** 08/25/2018

SAFETY DATA SHEET

1. IDENTIFICATION

Product Name:CYMEL® 3020 ResinSynonyms:Methylated/Butylated melamine formaldehyde resinProduct Description:Methylated butylated melamine formaldehyde resinMolecular Formula:PolymerMolecular Weight:PolymerIntended/Recommended Use:Raw material for surface coatings

Allnex USA Inc., 9005 Westside Parkway, Alpharetta, Georgia 30009, USA For Product and all Non-Emergency Information call your local Allnex contact point or contact us at http://www.allnex.com/contact

EMERGENCY PHONE (24 hours/day) - For emergency only involving spill, leak, fire, exposure or accident call:

+1-866-928-0789 (toll free) or +1-215-207-0061 (Carechem 24 - Allnex29003-NCEC) See Section 16 for Emergency phone numbers for other regions.

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2. HAZARDS IDENTIFICATION

GHS Classification

Aquatic Environment Chronic Hazard Category 4

LABEL ELEMENTS

Hazard Statements

May cause long lasting harmful effects to aquatic life

Precautionary Statements

Avoid release to the environment. Dispose of contents/container in accordance with local and national regulations.

Hazards Not Otherwise Classified (HNOC), Other Hazards

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS

Component / CAS No.	%	GHS Classification	Carcinogen
Melamine RPW formaldehyde, methylated, butylated 68036-97-5	> 99	Aquatic Chronic 4 (H413)	-
Methanol 67-56-1	<= 0.1	Flam. Liq. 2 (H225) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) STOT SE 1 (H370) Skin Irrit. 3 (H316) Eye Irrit. 2B (H320)	-
Formaldehyde 50-00-0	< 0.1	Carc. 1B (H350) Muta. 2 (H341) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 2 (H401)	IARC 1 NTP ACGIH A2

The specific chemical identity and/or exact percentage of composition for one or more ingredients has been withheld as a trade secret.

Additional GHS classification or other information may be included in this section but has not been adopted by OSHA. See Section 16 for full text of H phrases.

4. FIRST AID MEASURES

First-aid Measures

Inhalation:

Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms.

Skin Contact:

Wash immediately with plenty of water and soap.

Eye Contact:

Rinse immediately with plenty of water for at least 15 minutes.

Ingestion:

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

Most Important Symptoms and Effects, Acute and Delayed

None known.

Immediate Medical Attention and Special Treatment Not applicable.

Notes To Physician:

No specific measures have been identified.

Suitable Extinguishing Media:

Use water spray, carbon dioxide or dry chemical.

Unsuitable Extinguishing Media:

None known.

Protective Equipment:

Firefighters, and others exposed, wear self-contained breathing apparatus.

Special Hazards:

Keep containers cool by spraying with water if exposed to fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Where exposure level is known, wear approved respirator suitable for level of exposure. Where exposure level is not known, wear approved, positive pressure, self-contained respirator. In addition to the protective clothing/equipment in Section 8 (Exposure Controls/Personal Protection), wear impermeable boots.

Methods For Cleaning Up:

Cover spills with some inert absorbent. Sweep up into containers for disposal. Flush spill area with water.

Environmental Precautions:

Avoid release to the environment.

References to other sections:

See Sections 7, 8 and 13 for additional information.

7. HANDLING AND STORAGE

HANDLING

Precautions: Avoid release to the environment.

Special Handling Statements: Provide good ventilation of working area (local exhaust ventilation if necessary). During processing and handling of the product, comply with the indicative occupational exposure limit values.

STORAGE

Store in a cool, dry, well ventilated place and keep container tightly closed. Keep away from heat sources and direct sunlight.

Storage Temperature: Store at -20 - 30 °C -4 - 86 °F **Reason:** Quality.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures:

Engineering controls are not usually necessary if good hygiene practices are followed.

Respiratory Protection:

For operations where inhalation exposure can occur use an approved respirator. Recommendations are listed below. Other protective respiratory equipment may be used based on user's own risk assessment. Recommended respirators include those certified by NIOSH.

<u>Recommended:</u> Full Face Mask with organic vapor cartridge, Type A filter (BP >65°C)

Eye Protection:

Wear eye/face protection such as chemical splash proof goggles or face shield.

Skin Protection:

Avoid skin contact. Wear impermeable gloves and suitable protective clothing.

Hand Protection:

Wear protective gloves. Recommendations are listed below. Other protective materials may be used based on user's own risk assessment. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Replace gloves immediately when torn or any change in appearance (dimension, color, flexibility etc.) is noticed.

<u>Gloves for repeated or prolonged exposure - non exhaustive list:</u> Nitrile rubber (NBR), thickness: > 0.38 mm, break through time: > 480 min

<u>Gloves for short term exposure/splash protection - non exhaustive list:</u> Nitrile rubber (NBR), thickness: 0.12 mm, break through time: up to 120 min

The chemical resistance depends on the type of product and amount of product on the glove. Therefore gloves need to be changed when in contact with chemicals.

Not suitable gloves - non exhaustive list: Polyvinyl alcohol (PVA), thickness: 0.2-0.3 mm

Due to many conditions (e.g. temperature, abrasion) the practical usage of a chemical protective glove in practice may be much shorter than the permeation time determined through testing. Use PE gloves as under gloves for difficult situations like for instance: high exposure, unknown composition or unknown properties of the chemicals.

Additional Advice:

Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water. It is recommended that a shower be taken after completion of workshift especially if significant contact has occurred. Work clothing should then be laundered prior to reuse. Street clothing should be stored separately from work clothing and protective equipment. Work clothing and shoes should not be taken home.

Exposure Limit(s)

67-56-1	Methanol		
OSHA (PEL)):	200 ppm (TWA)	
		260 mg/m ³ (TWA)	
ACGIH (TLV	′):	250 ppm (STEL)	
		(skin)	
		200 ppm (TWA)	
Other Value:		Not established	
50-00-0	Formaldehyde		
OSHA (PEL)):	0.75 ppm (TWA)	
		2 ppm (STEL)	
		2 ppm STEL 15 mir	
		0.5 ppm Action Lev	el
		0.75 ppm TWA	
ACGIH (TLV	,	0.3 ppm (Ceiling)	
Other Value:		Not established	

Biological Exposure Limit(s)

Methanol 67-56-1

Biological Exposure Indices 15 mg/L (urine - end of shift) (ACGIH)

9. PHYSICAL AND CHEMICAL PROPERTIES

10. STABILITY AND REACTIVITY

Reactivity:	No information available
Stability:	Stable.
Conditions To Avoid:	None known.
Polymerization:	Will not occur
Conditions To Avoid:	None known.
Materials To Avoid:	No specific incompatibility
Hazardous Decomposition Products:	Ammonia (NH3) oxides of carbon amine Nitrous gases

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Not applicable.

Acute toxicity - oral: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

Acute toxicity - dermal: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

Acute toxicity - inhalation: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

Skin corrosion / irritation: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

Serious eye damage / eye irritation: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

Respiratory sensitization: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

Skin sensitization: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

Carcinogenicity: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

Germ cell mutagenicity: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

Reproductive toxicity: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

Specific target organ toxicity (STOT) - single exposure: Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

Specific target organ toxicity (STOT) - repeated exposure: Not Classified. - Based on available data and/or professional judgment, the classification criteria are not met.

Aspiration hazard: Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

PRODUCT TOXICITY INFORMATION

ACUTE TOXICITY DATA oral dermal inhalation	rat rabbit rat	Acute LD50 Acute LD50 Acute LC50 4 hr	> 2000 mg/kg > 2000 mg/kg > 20 mg/l (Vapors)
LOCAL EFFECTS ON SKIN AND EYE Acute Irritation Acute Irritation	dermal eye	Not irritating Not irritating	
ALLERGIC SENSITIZATION Sensitization	dermal	No data	

No data

inhalation

GENOTOXICITY

Sensitization

Assays for Gene Mutations	
Ames Salmonella Assay	No data

OTHER INFORMATION

The product toxicity information above has been estimated.

11. TOXICOLOGICAL INFORMATION

HAZARDOUS INGREDIENT TOXICITY DATA

Methanol has acute oral (rat) and dermal (rabbit) LD50 values of >5600 mg/kg and 15800 mg/kg, respectively. The 4-hour inhalation exposure LC50 (rat) for methanol vapor is 64,000 ppm (83.78 mg/L). Acute exposure to methanol vapor may cause headache and gastrointestinal irritation. Chronic or extreme inhalation exposure to vapors can cause blurred vision, serious eye damage, central nervous depression and death. Ingestion and inhalation of methanol has caused blindness in humans. Ingestion can also cause harmful effects on the central nervous system and gastrointestinal systems and can lead to death in extreme cases. Absorption of methanol can cause systemic toxicity. It has been reported that chronic skin absorption of methanol has caused ocular disturbances and blindness. Methanol has also been reported to be a teratogen and fetotoxin in laboratory animals and has demonstrated mutagenic activity, in vivo, in mammalian cells. Methanol may cause moderate eye and skin irritation. Literature also reports an oral (rat) LD50 value of 13.0 ml/kg (10g/kg).

Formaldehyde has oral (rat) and dermal (rabbit) LD50 values of 640 mg/kg and 270 mg/kg, respectively. 50% of the mice had reduced respiration rate following a 10 minutes inhalation exposure at a concentration of 4.9 ppm. Irritation of the nose and throat has been observed in people exposed to formaldehyde vapor levels in excess of 1 ppm. Normal breathing may be seriously impaired and serious lung damage can occur. Formaldehyde has been reported to cause pulmonary hypersensitivity in some individuals who were exposed to concentrations known to cause irritation; however, no pulmonary sensitization has been demonstrated in laboratory animal studies. Formaldehyde solutions can cause severe eve and skin irritation. Repeated skin exposure to solutions of 2% or more formaldehyde has caused allergic skin reactions. Formaldehyde was found to be weakly genotoxic in a number of in vitro genotoxicity tests and positive in certain in vivo genotoxicity studies. Formaldehyde did not cause birth defects in rats inhaling concentrations up to 10 ppm. However, a study using higher levels did show a slight but statistically significant reduction in male fetal body weight. Lifetime inhalation of formaldehyde vapor at concentrations above 5 ppm for 6 hours per day, caused nasal tumors in laboratory animals. The International Agency for Research on Cancer (IARC) has classified formaldehyde as a Group 1 (known) human carcinogen based on epidemiological evidence linking formaldehyde exposure to the occurrence of nasopharyngeal cancer, a rare type of cancer. IARC also found limited evidence of cancer of the nasal cavity and paranasal sinuses and insufficient evidence for an association between formaldehyde and leukemia. Inhalation caused liver and kidney damage in laboratory animal tests.

MARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

12. ECOLOGICAL INFORMATION

TOXICITY, PERSISTENCE AND DEGRADABILITY, BIOACCUMULATIVE POTENTIAL, MOBILITY IN SOIL, OTHER ADVERSE EFFECTS

Overall Environmental Toxicity: May cause long lasting harmful effects to aquatic life.

Due to extreme low solubility in water, and therefore the non-availability to species, this product is regarded as not hazardous to aquatic organisms. The product is also not readily biodegradable.

DEGRADATION

Test: Biodegradability **Duration:** 28 day < 70 %

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HAZARDOUS INGREDIENT TOXICITY DATA

Component / CAS No.	Toxicity to Fish
Melamine RPW formaldehyde, methylated, butylated (68036-97-5)	Not available
Methanol (67-56-1)	LC50 = 28200 mg/L - Pimephales promelas (96h) LC50 18 - 20 mL/L - Oncorhynchus mykiss (96h) LC50 > 100 mg/L - Pimephales promelas (96h) LC50 13500 - 17600 mg/L - Lepomis macrochirus (96h) LC50 19500 - 20700 mg/L - Oncorhynchus mykiss (96h)
Formaldehyde (50-00-0)	LC50 = 6.7 mg/L - Morone saxatilis (96h)

Component / CAS No.	Toxicity to Water Flea
Melamine RPW formaldehyde, methylated, butylated (68036-97-5)	Not available
Methanol (67-56-1)	Not available
Formaldehyde (50-00-0)	EC50 = 5.8 mg/L - Daphnia pulex (48h)

Component / CAS No.	Toxicity to Algae
Melamine RPW formaldehyde,	Not available
methylated, butylated (68036-97-5)	
Methanol (67-56-1)	Not available
Formaldehyde (50-00-0)	EC50 = 4.89 mg/L - Desmodesmus subspicatus
	(72hrs)

Component / CAS No.	Partition coefficient
Melamine RPW formaldehyde,	Not available
methylated, butylated (68036-97-5)	
Methanol (67-56-1)	-0.77
Formaldehyde (50-00-0)	0.35

13. DISPOSAL CONSIDERATIONS

The information on RCRA waste classification and disposal methodology provided below applies only to the product, as supplied. If the material has been altered or contaminated, or it has exceeded its recommended shelf life, the guidance may be inapplicable. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA "listed hazardous waste" or has any of the four RCRA "hazardous" waste characteristics." Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA "listed hazardous waste"; information contained in Section 15 of this SDS is not intended to indicate if the product is a "listed hazardous waste." RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: Ignitability, Corrosivity, Reactivity, and Toxicity. To determine Ignitability, see Section 9 of this SDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 3 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed. The Company encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. The Company recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. The Company has provided the foregoing for information only; the person generating the waste is responsible for determining the waste classification and disposal method.

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

US DOT

Dangerous Goods? Not applicable/Not regulated

TRANSPORT CANADA

Dangerous Goods? Not applicable/Not regulated

ICAO / IATA

Dangerous Goods? Not applicable/Not regulated

IMO

Dangerous Goods? Not applicable/Not regulated

15. REGULATORY INFORMATION

Inventory Information

United States (USA): All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

Canada: All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

European Economic Area (including EU): When purchased from an Allnex legal entity based in the EEA (EU or Norway), this product is compliant with the registration of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt and/or registered.

Australia: All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on AICS.

New Zealand: This product is approved or exempt under the Hazardous Substances and New Organisms (HSNO) Act.

China: All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

Japan: All components of this product are included on the Japanese (ENCS and ISHL) inventories or are not required to be listed on the Japanese inventories.

Korea: All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory.

Philippines: All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine inventory.

Taiwan: All components of this product are included in the Taiwan chemical substance inventory or are not required to be listed on the Taiwan chemical substance inventory (TCSI).

Switzerland: All components of this product are exempt from the new substance notification requirements for Switzerland (SR 813.11 art. 24-26).

OTHER ENVIRONMENTAL INFORMATION

The following components of this product may be subject to reporting requirements pursuant to Section 313 of CERCLA (40 CFR 372), Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40 CFR 311, etc.) See Section 13 for information on waste classification and waste disposal of this product.

Component / CAS No.	%	TPQ (lbs)	RQ(lbs)	S313	TSCA 12B
Formaldehyde	< 0.1	500	100	Yes	No
50-00-0					

PRODUCT HAZARD CATEGORY UNDER SECTIONS 311 AND 312 OF EPCRA

Physical Hazards Not applicable

Health Hazards Not applicable

16. OTHER INFORMATION

NFPA Hazard Rating (National Fire Protection Association)

Health: 1 - Materials that, under emergency conditions, can cause significant irritation.

Fire: 1 - Materials that must be preheated before ignition can occur.

Instability: 0 - Materials that in themselves are normally stable, even under fire exposure conditions.

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Date Prepared:	08/25/2018
Date of last significant revision:	09/04/2015

Component - Hazard Statements

Melamine RPW formaldehyde, methylated, butylated

H413 - May cause long lasting harmful effects to aquatic life.

Methanol

- H225 Highly flammable liquid and vapor.
- H301 Toxic if swallowed.
- H311 Toxic in contact with skin.
- H316 Causes mild skin irritation.
- H320 Causes eye irritation.
- H331 Toxic if inhaled.
- H370 Causes damage to organs.

Formaldehyde

- H301 Toxic if swallowed.
- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H331 Toxic if inhaled.
- H341 Suspected of causing genetic defects.
- H350 May cause cancer.
- H401 Toxic to aquatic life.

Emergency phone numbers for other regions

Asia Pacific

Australia: +61 1800 022 037 (Allnex Australia) China (PRC): +86(0)25 8547 7110 (Jiangsu registration center) / +86(0)532 8388 9090 (NRCC) India: 000 800 100 7479 (toll free) or +65 3158 1198 (Carechem 24) Indonesia: 007 803 011 0293 (Carechem 24) Japan: +81 345 789 341 (Carechem 24) Korea: +82 2 3479 8401 (Carechem 24) Malavsia: +60 3 6207 4347 (Carechem 24) New Zealand: +64 0800 803 002 (Allnex New Zealand) Philippines: +63 2 231 2149 (Carechem 24) Taiwan: +886 2 8793 3212 (Carechem 24) Vietnam: +84 8 4458 2388 (Carechem 24) All Others: +65 3158 1074 (Carechem 24) Europe +44 (0) 1235 239 670 (Carechem 24) Middle East, Africa +44 (0) 1235 239 671 (Carechem 24) Latin America Brazil: +55-800-707-7022 (toll free) or +55-11-98149-0850 (Suatrans 24) Chile: +56 2 2582 9336 (Carechem 24) Mexico and all others: +52-555-004-8763 (Carechem 24)

Prepared By: Product Stewardship & Regulatory Affairs Department, http://www.allnex.com/contact

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